

**Table D1
Data Quality Objectives
Sampling and Analysis Plan Addendum
Former Police Department Firing Range
City of Henderson, Nevada**

State the Problem	Identify the Decisions	Identify Inputs to the Decisions	Define The Study Boundaries	Develop Decision Rules	Specify Limits on Decision Errors	Optimize the Design
<p>The impact of former use of a firing range on soil located on the range floor at the site needs to be evaluated.</p> <p>The area within that portion of the north berm from which lead impacted soil exceeding the industrial PRG is to be removed will require confirmation sampling.</p>	<p>1) Is lead present at concentrations exceeding the industrial PRG in soil in Range Floor?</p> <p>2) Has the lead impacted soil along the north berm (above the industrial PRG) been removed?</p>	<p>1) Additional chemical data from analysis of soil samples collected after removal of lead impacted soil.</p> <p>2) Chemical data from analysis of soil samples collected from the range floor</p> <p>3) EPA Region IX industrial soil PRGs for lead of 800 mg/kg.</p>	<p>Range Floor Collect samples at the surface and 1 foot below the existing range floor surface using five point composite sampling method. Grids are located between the east and west berms and extend from the north berm south to the firing line.</p> <p>North Berm Following contaminated soil removal, collect surface samples at distances of 0, 5, 10, 15, and 20 feet up the berm face to approximately correspond to sampling intervals conducted during the field investigation.</p> <p>Temporal Boundaries It is anticipated that data will be collected in a single sampling event.</p>	<p>Range Floor 1) If soil sampling shows lead concentrations below the industrial PRG, then no impact to the range floor requiring remediation exists, and the range floor can be left as is.</p> <p>2) If soil sampling shows lead concentrations above the industrial PRG, then soil will be required to be removed.</p> <p>North Berm 1) If confirmation soil sampling on the north berm area indicates remaining lead concentrations below the industrial PRG, then no additional actions will be required.</p> <p>2) If confirmation sampling on north berm shows remaining lead concentrations above the industrial PRG, then additional excavation of material will be required.</p>	<p>Range Floor A potential error in the design of the soil analytical program would be to miss areas of impacted lead concentrations above the PRG. The sampling program has been designed to limit this potential error by using a five point composite sampling arrangement.</p> <p>North Berm A potential error in the design of the confirmation soil sample analytical program would be to miss areas of remaining lead concentrations in soil, if any, above the PRG. The sampling program has been designed to limit this potential error by establishing rows of surface samples spaced 25-feet apart within the portion of the north berm where impacted material is removed.</p> <p>A potential error in analysis of soil samples would be to incorrectly quantify the chemicals present in soil. The acceptable range of decision error would be a consequence of field and/or analytical errors and will be evaluated during data validation.</p>	<p>Range Floor Sample grids will consist of 25- by 25-foot area grids located between the firing line and north berm (16 total) and 50- by 50-foot area grids for the remaining portions of the range floor (10 total). A total of 52 composite samples and 6 duplicate samples will be collected and analyzed as follows:</p> <ul style="list-style-type: none"> • 26 grid areas • One composite sample comprised of 5 subsamples from each grid. Samples will be collected at the surface and 1 foot below the range floor. • All samples analyzed for lead by EPA Test Method 6010 <p>North Berm Surface soil sampling to confirm removal of impacted soil will be conducted as follows:</p> <ul style="list-style-type: none"> • 54 primary samples and 6 duplicate sample • 13 sample rows • 2 to 5 surface samples from each row, depending on the amount of berm face excavated. • All samples analyzed for lead by EPA Test Method 6010B.